Project Library PREPARE: Planning, Response, Emergency Preparedness, and Resilience Education

Introduction: The School of Information Science at the University of South Carolina (iSchool/USC) requests $249,721 for a three-year National Leadership Grant--Implementation to create and implement comprehensive preparedness and emergency training programs (hereafter the training programs) for library staff at various levels, including templates, service guidelines, and professional toolkits. Broad topics may include, but are not limited to, these overarching topics -- **Information First Responders; Building Community Engagement and Partnership; Emergency Preparedness and Disaster Response for Libraries** per IMLS goals (IMLS Goal 1, Objectives 1.1, 1.2, & 1.3; IMLS Goal 4, Objectives 4.1). The training programs will cultivate crisis leadership in library personnel; assist library staff in designing and providing critical community-first information services before, during, and after natural disasters, as well as man-made wildfires (hereafter disasters) (IMLS Goal 1, Objectives 1.1, 1.2, & 1.3); and support libraries to serve as community catalysts (IMLS, 2016). The programs also cover disaster management plans, with examples of adaptation and implementation, as well as the use of technology/multiple channels to disseminate critical and credible disaster information (IMLS Goal 4, Objectives 4.1). These topics will help libraries increase disaster preparedness/recovery capacity and strengthen community resilience. Evidence-based training programs will be created, employing themes from the library emergency management literature and incorporating findings from five studies completed by the project team from 2015-2023. Those studies examined public libraries and their community engagement in times of disasters (e.g., floods, hurricanes, wildfires, tornadoes, and mountain flooding/mudslides) in South Carolina, Texas, Northern California, and Kentucky; a summary of the findings of these studies is located in a supporting document (please see Supportingdoc1). **The training programs will follow FEMA disaster lifecycle phases and emphasize community crisis communication, covering risk perception, assessment, immediate response, and preparedness, as well as providing ample practice in communicating with the communities served**. A multidisciplinary research team comprising educators, researchers, librarians, library administrators, and other professionals in the lead administrative, communications, and library and information science roles will spearhead the project. An advisory board and the instructors of the training programs will ensure the representation of the diverse audiences targeted by this initiative. **The proposed training programs, professional toolkits, and related resources will be available on an open-access website [i.e., a sustainable and shareable disaster information services repository website (hereafter the website)] funded by the Network of National Library of Medicine Region 2, allowing all resources to be accessed freely**. The resource site will be permanently hosted by the College of Information and Communication (CIC/USC) for consistency and sustainability.

Project Justification

Climate Change: Extreme weather is the new normal. Climate crises are affecting many areas nationwide, including those that have not previously experienced severe weather events or disasters. Southern California experienced record rainfall in February 2024, leading to a devastating flood that resulted in casualties, extensive damage, and property loss (Lin, 2024). Our research findings have documented that local libraries serve as emergency centers, climate evacuation centers, and information hubs for their communities in response to crises when natural disasters hit (Tu-Keefner, F., 2019; Tu-Keefner, F. et al., 2017, 2018, 2020).

Addressing Crisis Preparedness in Academic and Public Libraries. Although the team's fieldwork has focused on public libraries in times of crisis, academic libraries are also affected, along with the campuses and broader communities they serve. Crisis leadership skills in these settings are no less crucial, with many themes identified in the literature–including the need for preparation and risk mitigation, crisis communication skills, and organizational resilience–carrying across library types (Capdarest-Arest, 2022; Halsted et al., 2014; Munro, 2011; Parker, 2012; Pierard et al., 2006; Wilkinson, 2015). In fact, the evidence suggests that all types of libraries may be underprepared. The 2014 Heritage Health Index Survey of cultural heritage institutions based in the United States revealed that less than half (42%) of respondents had a written emergency plan, and only 24% indicated they were able to carry out that plan (IMLS, 2019).

The frequency and severity of disruptions, including global pandemics and widespread weather emergencies, have only magnified the need to prepare public and academic libraries to act as resilient organizations. Thus, this project will develop and implement training programs to meet the needs of both audiences and will explicitly tap the potential for partnership across library types. We recognize that there are other projects exploring training for libraries in the context of emergency planning, community resilience, and climate resiliency action, including those under the aegis of the IMLS LG. Two examples are the CLIR Climate Resiliency Action Workshop Program (IMLS LG-254837-OLS-23) Council on Library and Information Resources) and iSmart for disasters: exploring smart and connected disaster planning for small and rural libraries (IMLS LG-246371-OLS-20).

Libraries and Community Engagement in Times of Crisis. While serving as crucial hubs for information dissemination to their specific communities, libraries are increasingly expected to foster community engagement (IMLS, 2016). They are involved in building relationships with a community's most vulnerable segments (Dowd, 2018; Kreps, 2005). Much research has found that libraries play a critical role during emergencies, such as hurricanes, tornadoes, earthquakes, and other natural disasters (Tu-Keefner et al., 2017). Public health professionals recognize that local public libraries have the potential to aid in disaster preparedness, response, and recovery (Tu-Keefner et al., 2017). Research results show that public libraries have successfully collaborated with public health agencies, thereby illustrating the libraries' value in facilitating emergency response and recovery during crises (Liu et al., 2017; Tu-Keefner et al., 2017). Zach and McKnight (2010) documented how information professionals rose to the occasion in 2005 when they helped evacuees from the areas severely damaged by both Hurricane Katrina and Hurricane Rita fill out FEMA online claim forms. They also showed how librarians provided critical information to first responders. Academic libraries have also stepped in to help, serving as a critical forum where campus experts and communities can discuss complex topics regarding climate change (Fondren Library, 2022). Similarly, during the pandemic stages of Covid-19, academic libraries frequently partnered with campus health personnel to provide information along with services such as drop-off testing sites and test vending machines (IUPUI, 2024).

Disaster Preparedness and LIS Pedagogy/Librarians' Professional Development. Librarianship is deeply committed to lifelong learning, with professional librarians and staff valuing continuing education (CE) and professional development as the highest priorities. Librarians are responsible for the constant and consistent provision of a variety of information services to the communities they serve, including in times of crisis. (Bertot, Jaeger, & Langa, 2006; Zach, 2011; Bruxvoort, 2012; Bishop & Veil, 2013; Alajmi, 2016). Given their responsibility to consistently provide diverse information services, including during crises, information professionals must be well prepared for leadership roles, necessitating the inclusion of disaster preparedness, response, and recovery in regular curricula and CE programs (Tu-Keefner et al., 2017). However, the ending of the Medical Library Association's Disaster Information Specialization program in April 2023 (Medical Library Association, 2024) underscores the urgent need for professional development training for librarians and library staff members. Additionally, the conclusion in 2018 of the NEH-funded initiative Western States and Territories Preservation Assistance Service (WESTPAS), which provided disaster response and collection preservation training, further highlights the necessity for ongoing support and training in this critical area (Foundation for Advancement in Conservation, 2021).

FEMA Disaster Lifecycle. The FEMA (Federal Emergency Management Agency) disaster lifecycle unfolds through four integral phases, each pivotal in emergency management. Training programs for librarians, aligned with the FEMA disaster lifecycle, enhance their ability to collaborate with first responders and FEMA agents. Preparedness training covers emergency response plans and communication protocols, while response-focused modules familiarize librarians with the language of emergency services. Special emphasis on collaboration with FEMA includes understanding organizational structures and procedures. Recovery support training equips librarians to aid communities in navigating FEMA's recovery initiatives. Emphasis on effective communication skills ensures librarians can convey critical information clearly and contribute significantly to all phases of the disaster lifecycle.

Since libraries serve as vital community hubs, in the "Mitigation" phase, preemptive actions concentrate on reducing disaster impact through measures like strict building codes and resilient infrastructure. The "Preparedness" phase equips communities, including libraries, with skills and resources for effective disaster navigation through

planning, training, and public awareness efforts. The "Response" phase involves swift actions such as search and rescue, medical care, and shelter establishment, leveraging libraries as information centers. In the post-crisis period, the "Recovery" phase focuses on restoring the community. Libraries can play a vital role in this effort, contributing significantly to activities such as rebuilding infrastructure. The FEMA disaster lifecycle emphasizes a holistic approach toward emergency management practices for libraries that produce a coordinated response at local, regional, and national levels.

Developing a Disaster Information Service Framework for Libraries and Librarians. Since 2015, our research on the role of public libraries has utilized a framework for effective health risk communication preparedness and implementation, namely *Effective health risk communication about pandemic influenza for vulnerable populations* (Vaughan & Tinker, 2009). Through a public health lens, our research has identified effective collaborations between public libraries and public health agencies, showing the value of public libraries in facilitating emergency response and recovery during a variety of disasters. **Because the existing framework does not provide comprehensive guidelines, one of our objectives is to use data from various studies to devise the appropriate guidelines for implementation by libraries and librarians in times of crisis, thus aiding libraries in offering essential community-first disaster information services**. For this proposed project, we will consolidate the research results and develop the framework following the formats presented in both Vaughan and Tinker, 2009, and W*HO competency framework: Building a response workforce to manage infodemics* (WHO, 2021). This framework document includes service guidelines, required knowledge and skills, and examples/models of services. A condensed version of various sections within the framework will be prepared as professional toolkits. This initiative will help us achieve our goal of developing service guidelines for libraries and librarians to implement when disasters occur in their communities.

Project Work Plan

Project Design. The proposed project draws upon extensive research findings accumulated over the years. The purpose is to incorporate research evidence into practical applications by integrating librarians' required basic knowledge and skills, crisis leadership qualifications, and disaster information service models. Our goal is to create accessible training programs for librarians and staff members, available anytime and anywhere. Additionally, we aim to develop a comprehensive framework that includes service guidelines and professional toolkits (hereafter the framework) to assist library personnel in their practices during times of crisis. The following summarizes our previous studies and proposed developments.

Previous Research. Immediately after the 2015 SC Floods, situation-specific research (funded by the 2015 SC Floods Research Initiative and sponsored by the Office of the Vice President for Research) investigated public libraries' value to their communities in providing critical information services and the libraries' legitimacy as partners of public health agencies. Qualitative methodology was used, including focus-group meetings with public library administrators and librarians and an in-depth interview with a FEMA agent. In 2017, a survey study examined how community members accessed information during the catastrophic flooding in October 2015 in the Midlands and during Hurricane Matthew in October 2016 in the coastal zone of South Carolina. Situation-specific research conducted in the third study, which ran from the beginning of November 2018 until the end of 2019, targeted the Houston Public Library system's main library and its branches affected by Hurricane Harvey in 2017. Focus-group meetings were again used for data collection, and five meetings were held at the Houston Public Library's main library. The team talked to over 50 public library administrators, librarians, and staff members. Librarians' basic required competencies and leadership qualifications have been identified as a result of these studies. In 2022, the team explored how public libraries and librarians provided community-first health and disaster information services as well as their partnerships with agencies from the public and private sectors during the wildfire disaster in northern California that began in 2017. The targeted public libraries were located in Napa, Sonoma, Lake, Mendocino, El Dorado, Nevada, and Placer. Additional interviews took place with leadership from Tehama and Yolo counties. At the end of 2023, the project team conducted a fifth study focusing on public libraries affected by tornadoes in western

Kentucky and mountain flooding in eastern Appalachia over the last five years. The targeted public libraries are Marshall, Graves, and Hopkins counties in western Kentucky, and Perry, Letcher, and Knott counties in the east and in the Appalachian Mountains.

Forthcoming Funded Research (May 1-July 31). The team has already secured funding to investigate the role of public libraries in serving their communities during extreme heat events in South Carolina and earthquakes in California. The original focus was on earthquakes in Southern California; however, recent information from our local collaborators has suggested that the visiting research team focus on multiple disasters, including but not limited to earthquakes, floods, fires, snowstorms, and extreme heat. Focus groups will take place in California in June 2024. The result of this research will be integrated into the current data about extreme heat in South Carolina. Aligning with IMLS Goal 4, Objective 4.1, this information and the previous data collected will inform the creation of service guidelines and toolkits for the community-first information services to benefit the library staff and community at large before, during, and after disasters. Following the requirements of the Excel grant project, an advisory board of librarians and other professionals will be created, reflecting the diverse populations within the communities studied and the leaders in the library community. As mentioned below, board members and others in the network will assist in identifying participants and sites for the data collection, building of resources, and evaluation of the project. IMLS has been particularly supportive of libraries as community catalysts in building resilience, and this proposal and the interrelated research and grants will help build on that effort and further solidify its role and value.

Sampling and Study Participants: Purposive sampling will be used to recruit library administrators, librarians, and staff members as subjects from several locations based on their involvement in library operations during and after the earthquakes. The subjects will not be limited to MLIS professional librarians but include a range of those who have significant involvement in library operations before, during, and after a natural disaster. Photovoice and storytelling methods will be used to investigate how the library personnel handled safety, damage assessment, response and recovery, and community-centered services. Guided by information from the Pacific Library Partnership, NorthNet Library System, and the California State Library, the team will use the same research protocol as previous studies. Questions focus on the three sections (process, people, partners) related to public libraries' and librarians' operations before, during, and after earthquakes in focus groups that generally last one hour. Additional qualitative data, including tours, photos, and sharing of collateral materials such as signs and handouts, is gathered. In previous research, this approach has been successful in helping participants share personal stories, specific incidents, and related community responses. A common theme during the pandemic but also at other times is the crossover of multiple disasters at one time. Therefore, this research may include multiple disasters, including earthquakes, flooding, extreme heat/cold, snowstorms, and fires.

Proposed Project

Phase 1 (August 1, 2024 - June 30, 2025): The team members and a project assistant (a doctoral student recruited for the project) will be responsible for the following tasks. Each team member will lead specific task objectives and monitor the timelines. Additionally, several advisory board members will be recruited to begin collaborating with the project team.

Task 1 (August 1, 2024-December 31, 2024): The project will concentrate on laying the groundwork for the development of a disaster information service framework for libraries and librarians. Significant effort will be dedicated to organizing and analyzing data. The following objectives will be accomplished during the Task 1 period.

Objective 1: Advisory Board – The project team commits to recruiting six advisory board members who represent the diverse audiences this project aims to support. They will come from emergency preparedness and operations and risk communication areas and must have experience in designing and providing critical community-first information services both before, during, and after the disasters. Currently, five members have committed to serving on the project advisory board: a public library director who leads a staff that has been integral to the local emergency operation center for years; the Chief of Preparedness at South Carolina Emergency Management; an

archivist who developed the disaster preparedness plan and infrastructure for a research center for African American history and culture with which she is affiliated; a communication expert responsible for media relations at the Co-PIs' state department of public health; and a State Director of Library Services for the Blind and Print Disabled who can provide advice on accessibility/inclusion issues and services to community members with disabilities. Their names, positions, and affiliations are listed in the "Project Personnel" section, with detailed bios provided in the "Resumes" file. **The project team anticipates completing the recruitment process and onboarding all members by the end of September 2024**. Tentatively, the project team plans to hold a meeting with the advisory board members regarding the goals to achieve in this period and to meet with them again at the end of 2024 to inform them of the project's progress as well as to seek their advice regarding Task 2 (January 1, 2025-June 30, 2025).

Objective 2: The data collection phase will conclude, and efforts will shift to organizing and analyzing the gathered data. A codebook (to inform qualitative data analysis collected at the various stages of the project and facilitate the thematic study) to be used for data analysis will be revised and finalized based on the results of similar case studies conducted in 2015, 2017, 2018, 2022, and 2023. Afterward, we will complete organizing and analyzing the data collected for the study in the summer of 2024. A critical step following this will be to identify the required competencies for librarians from the study conducted in the summer of 2024 and integrate them into the existing list to compile a comprehensive one. **The project team anticipates initiating this process around early September 2024 and completing it by the beginning of November 2024**.

Objective 3: Another essential task during this time is to consolidate all the library directors'/librarians' operations and service examples/models identified from the six studies and categorize them into **Five Core Tasks of Crisis Leadership** and **Emotional Intelligence at Work** (Bell, 2018; Bhaduri, 2019; Boin, et al., 2005; Goleman, 1998; Martin, 2020; Shaffer, 2021; Stewart, 2017). We aim to ensure that the results align with public and academic library contexts. **The project team anticipates initiating this process around early October 2024 and completing it by the end of December 2024**.

Objective 4: During this period, the project will map data, the required competencies for librarians, and service examples/models identified into FEMA's disaster lifecycle phases for the development of the proposed training programs, which is the critical groundwork for this proposed project. One of the Co-PIs, an expert in this area, will anchor the operations. **The project team anticipates initiating this process around early October 2024 and completing it by the end of December 2024**.

Objective 5: The team will assemble the data collected from all the studies and conduct a thematic analysis study. The results of the thematic study will aid in the development of the framework for libraries and the proposed training programs. **The project team anticipates initiating this process around early October 2024 and completing it by the end of December 2024; however, we may continue this process in January 2025.**

Objective 6: One of the team members will oversee the project assistant to conduct a literature review and summarize the selected publications for review. The aim is to use the essential professional publications identified to support the development of the framework and the proposed training program. The eligibility criteria used for citation selection will be created for the selection of the publications for review. Several online information systems will be selected to identify the relevant publications; search strategies will be developed and finalized. A form developed by one of the Co-PIs will be utilized to chart the data from each publication selected for review, and then a summary of this publication will be written. **The project team anticipates initiating this process around early September 2024 and completing it by the end of December 2024**.

The project team's evaluations address the following questions: 1) does the groundwork support developing the framework? and 2) do the research findings aid in developing a framework? The project team will hold a focus group meeting with the advisory board members to assess the activities and progress of developing the proposed framework with service guidelines, seeking to ensure that the activities are reasonable and accessible to all sizes of libraries in various types of communities. Internal project management data, including discussion records generated by project team members during this period, will also be utilized for project assessment purposes.

Task 2 (January 1, 2025-June 30, 2025): The project team will complete the thematic analysis and begin to develop the framework. The following objectives will be accomplished during the Task 2 period.

Objective 1: The project team will consolidate the groundwork results and develop the framework following the formats presented in both *Effective health risk communication about pandemic influenza for vulnerable populations* and *WHO competency framework: Building a response workforce to manage infodemics*. Tentatively, the framework will comprise the following sections: 1) Executive summary, 2) Introduction, incorporating background and structure, 3) Phases for activities, and 4) Recommended implementation. Each phase will include examples and models of services. A condensed version of various sections within the framework will be prepared as professional toolkits. The team will meet with the advisory board to solicit their feedback upon finalizing the framework structure. Afterward, the project team will begin drafting the framework's content.

Each activity phase will include service guidelines, required knowledge and skills, along with examples/models of services. A condensed version of various sections within the framework will be prepared as professional toolkits. The team will meet with the advisory board to solicit their feedback upon finalizing the framework structure. Afterward, the project team will begin drafting the framework's content. **The project team anticipates initiating this process around early January 2025 and completing a draft of the framework by mid-March 2025**.

Objective 2: The advisory board members will conduct the peer review process to evaluate the effectiveness of the framework's draft and meet with team members to present their recommendations for revision. The project team will incorporate the advisory board's feedback to revise the draft and finalize the content. **We anticipate completing this peer-review process by early to mid-April 2025**. Upon receiving the evaluation and recommendations from the advisory board, the team will revise and finalize the content of the framework and prepare all the components outlined in the framework document. **The project team anticipates finalizing the framework document and its associated components by the end of May 2025.**

Objective 3: The project team will collaborate with advisory board members to identify three experts in the subject areas of this project to validate the framework. This validation process will enable the project team to promote the applications of these resources to library communities nationally and internationally. Two of the experts will be information professionals with expertise in developing disaster preparedness plans and delivering critical community-first information services before, during, and after a disaster. We will coordinate with advisory board members to select an appropriate risk communication or emergency preparedness professional for the third reviewer. **The project team aims to complete this validation process by the end of June 2025**. However, it is possible that the validation process may extend into and be completed during Phase 2.

Objective 4: The Project team will work with the advisory board to create strategies to promote awareness of the resources developed and the sustainable and shareable disaster information services repository website disseminating these resources. **The project team anticipates initiating this process around early June 2025 and completing it by the end of June 2025**.

Objective 5: One of the team members will anchor the preparation of the summary of the study conducted in the summer of 2024 and the literature review process by working with the project assistant. In this period, we plan to complete the summary of the findings and the literature review to be posted to the sustainable and shareable disaster information services repository website. **The project team anticipates completing this objective by the end of June 2025**.

Evaluations at this stage relate to the implementation element and address the following: 1) what is the effectiveness of the framework for libraries for different audiences?; 2) do the distribution channels for the framework reach the audiences easily to facilitate user access? 3) do the results of the literature review enhance the knowledge of the proposed project? Data collection will be conducted using multiple evaluation approaches. A survey study will be conducted with the experts who validate the framework to gather their feedback on the strengths and weaknesses of these resources. Additionally, the project team will hold a focus group meeting with the advisory board members to evaluate the effectiveness and progress of the Task 2 activities. Internal project management data, including discussion records generated by project team members during this period, will also be utilized for project assessment.

Phase 2 (July 1,2025-July 31, 2027): We will focus on training program development and implementation. The team will work with advisory members and others in the field as needed to ensure that the information and resources are clear and easy-to-use with procedures that manage access and updates.

Task 1 (July 1, 2025 - June 30, 2026): The project team will complete the validation process for the framework and its associated components. The team's primary focus will then shift towards planning for the development of the training programs.

        Objective 1: The online training modules are intended to convey core concepts in an effective and engaging way. Understanding that this training will target a variety of staff and partners at different levels of experience and educational backgrounds, the team proposes a set of themes such as **Information First Responders; Building Community Engagement and Partnership; Emergency Preparedness and Disaster Response for Libraries**. Within these topics shall be modules on subtopics that will draw from the results of previous studies. Learning outcomes with service examples/models for each module will be developed. Interactive components, such as the hands-on exercises offered by the Northeast Document Conservation Center (NEDCC), will be included. The advisory team, particularly those working with populations with disabilities of all types, will be critical in integrating the accessibility and inclusivity components. **The project team anticipates initiating this process around early July 2025 and completing the projected work by the end of October 2025**. If additional time is required, the team will carry forward the work associated with this activity to the following Objective periods.

        Objective 2: Ensuring that the selected instructors will provide not just subject expertise but also feel comfortable in working on the resources that meet the needs of a broad and varied audience. A set of criteria will be established for selecting the instructor candidates, and their roles will be clearly defined. For instance, we will decide whether instructors will narrate the lectures or be involved in the development of lecture transcripts. An instructional designer affiliated with one of the team members' organizations may be consulted. The potential candidates will include librarians from various types of libraries, including rural libraries, emergency preparedness and response professionals, and risk communication experts. Using contacts from previous research will create a strong pool of resources, while the project's diverse advisory board members will significantly enhance the network and expertise available to the project. **The process shall begin around early October 2025, with completion expected by mid-December 2026**.

        Objective 3: The team will dedicate a significant amount of time to developing the contents of each module according to the outlines established in Objective 1, which includes defining the learning outcomes of the lectures and providing and drafting the transcripts in various accessible formats. First, the team members aim to construct and prototype a full module for us to review and revise. Following the revision, the advisory board will examine this module to determine if the quality of the module requires substantial improvement. If so, the team will collaborate with the advisory board to determine appropriate processes and procedures. Once both the project team and advisory board members are satisfied with the content of this module, the project team will proceed with developing the remaining modules. **The anticipated initiation of this process is around early November 2025, with completion expected by the end of March 2026**. Should additional time be required, the team will carry forward the associated work to the Task 2 period.

        Objective 4: To ensure the accessibility of resources, the team will utilize Zoom for lecture recordings. The USC/CIC resources will facilitate video editing and post-production. While a dedicated YouTube channel offers wide distribution, alternative options will also be explored for those unable to access YouTube or lacking sufficient broadband speeds. With the expertise of a Continuing Education Consultant, resources will be posted to one centralized platform (i.e., the website). An advisory board member, knowledgeable in accessibility issues, will assist in selecting the software for the closed captioning of lecture videos. The team members will determine the technical structures of the website and develop specifications for the CIC/USC webmaster to organize training programs, the framework, and other resources on the website. Additionally, the team will discuss the policies and procedures for managing user access to the training programs and the selection criteria for the inclusion of resources on the website. **The project team anticipates completing the process by the end of October 2025**.

Objective 5: The team will develop the modules' contents following the plans established in Objective 1 **until the end of June 2026**.

The team will prioritize aligning modules with existing research findings. We expect to draw a diverse audience after the completion of our project and will focus on addressing any gaps in current educational offerings in our training programs. The project team's evaluations will determine whether the module contents of the training programs are consistently aligned with the research findings and the framework. The team will survey instructors to assess the training programs and select several individuals for one-on-one interviews regarding potential improvements. A focus group session may also be conducted with advisory members to gather feedback. Should additional time be required, the team will carry forward the associated work to the Task 2 period.

Task 2 (July 1, 2026 - July 31, 2027): The project team will finish creating all the proposed modules' resources and then move to the post-production process for all media components. Additionally, the team will focus on organizing resources and tailoring modules to cater to the diverse needs of various audiences, including paraprofessionals, LIS-degreed librarians, and partners.

Objective 1: The project team will focus on organizing resources and tailoring modules to cater to the diverse needs of various audiences, including paraprofessionals, LIS-degreed librarians, and partners. The team members who are information professionals will anchor these activities. **The anticipated initiation of this process is around early August 2026, with completion expected by the end of October 2026**.

Objective 2: After completing the activities outlined in Objective 1, the advisory board will review the program contents for further modifications. **The project team anticipates completing this process by the end of 2026**. Next, the project team will prepare the preliminary training programs, with completion expected by **the end of January 2027**.

Objective 3: In collaboration with advisory board members, the project team will recruit ten reviewers, including public and academic librarians as well as LIS educators, to evaluate the effectiveness of the preliminary training programs. Some of these reviewers will be information professionals identified from previous studies conducted by the project teams. Several LIS educators specializing in community engagement, crisis leadership, and disaster information services will be nominated. A pool of potential candidates will be assembled. We will administer pre- and post-tests with reviewers who have completed the modules to evaluate the effectiveness of the training programs. The tests will be used to assess the reviewers' growth in knowledge and skills. In addition, reviewers will be surveyed to gain feedback on their learning experience, including suggestions for improvements. Further adjustments will be made to finalize the modules of all the training programs for implementation. **The anticipated initiation of this process is around early February 2027, with completion expected by the end of March 2027**.

Objective 4: The project team is currently constructing the website (award information in Supportingdoc3). The training, framework, and other resources will be uploaded by **the end of April 2027**. As previously noted, the CIC/USC will host the site and work with the team to ensure currency and sustainability.

Objective 5: The team members will also discuss the marketing strategy to promote awareness of the training and resources of the website with the advisory board and other professionals to develop the written plan. **This portion will take place from early March 2027, with completion expected by the end of April 2027**.

Objective 6: CIC/USC Biometrics and User Experience (BaUX) Lab will assist the project team in assessing the website's user experience, distributing resources, and gathering access logs of resources posted on the website to evaluate the effectiveness of the promotion strategies. Evaluations at this stage will focus on the project's implementation and address the following questions: 1) what is the effectiveness of the training programs for different audiences? 2) are the resources on the website conducive to promoting professional development for librarians and library staff/paraprofessionals? 3) do the distribution channels for the training programs and professional toolkits facilitate easy access for the audiences? The project team will work with the BaUX Lab personnel to develop the review protocol, and the BaUX Lab personnel will be commissioned to complete the process and provide the review results to the project team. **The project team aims to complete this process by the end of June 2027**.

In the final period before the project expiration, the team will verify the details of the created resources and ensure website accessibility. Feedback on the overall project resources on the website from the ten reviewers who

assessed the training programs will be gathered through surveys to guide more revisions. Additionally, several reviewers will be invited for one-on-one interviews to identify the programs' strengths and weaknesses for further improvement. The project team will also survey and interview advisory board members to evaluate the project's effectiveness. Internal project management data, including discussion records generated by project team members during this period, will also be utilized for project assessment.

Project Results

The proposed project will integrate extensive research findings into a comprehensive framework comprising service guidelines, professional toolkits, and tailored training programs for librarians, library staff members, and community partners or collaborators. Our commitment is to share these practical applications created by combining librarians' fundamental knowledge and skills, crisis leadership qualifications, and disaster information service models that will be shared nationally and internationally. As previously stated, many libraries–whether public or academic–are based in small and rural communities with limited resources. Feedback throughout the previous studies recommended developing reasonable, practical resources for small libraries with limited staff. The experience and levels of education of public library staff vary greatly; with our commitment to diversity, equity, and inclusion, the project allows for the integration of user feedback at all levels.

The website, designed to host current research findings and resources, is being developed with long-term goals in mind. The aim is to promote the use of existing resources, such as those of the Network of National Library of Medicine (NNLM) and the National Library of Medicine (NLM), as well as other essential professional materials, including some previously funded by IMLS grants (New Jersey State Library's workbook and guidebook, NEDCC resources and training, NorthNet's Recovering Together grant, and Florida State University MLIS program's rural research project). This centralized resource portal will be a central location to access free, evidence-based information for librarians, staff, and partners anytime, anywhere.

Marketing takes place through project leaders' extensive network, including but not limited to academic libraries, state library agencies, public libraries, community partners, and national and state emergency management leadership. Communication about the comprehensive resource will be shared at professional conferences across libraries and government network conferences within the emergency management sphere. Additional promotional efforts will take place as point-of-impact opportunities arise, and any identified gaps where these resources are essential will be addressed accordingly. Working with international collaborators could be another area of focus, alongside adapting resources to meet specific needs.

Notifications of the resources, training programs, and related updates will be shared via professional listservs, social media, and communications of all kinds. The team members will promote our creation by making presentations at professional conferences (e.g., state conventions, ALA, ACRL, PLA, ARSL, Core Forum, and similar) and publishing professional publications in major journal titles (e.g., LQ, PLQ) in the field of communication and library science. The project team will also promote the training programs' curricula by sharing the information with other MLIS programs at conferences (e.g., ALISE, ASIS&T), in professional publications (e.g., JELIS), and on LIS education-related professional listservs.

The team will also facilitate the development of professional development opportunities, including guest lectures in LIS programs, webinars, mini-trainings, and participatory workshops aimed at delivering critical community-first information services. Through collaboration with members affiliated with the Chief Officers of State Library Agencies (COSLA and its regional groups), the project team will package training programs into small, individual professional development components accessible to library personnel serving in small libraries and institutions in rural areas. Additionally, exploring the possibility of recording these components on DVD will ensure access for individuals without high-speed internet connectivity. In short, we aim to ensure that the resources generated from the project development will benefit libraries' staff development initiatives nationally and internationally.

The digital research products associated with the project will be archived in the OSF.io repository. The project team, advisory board, and partners will also promote this model widely and evaluate the data management plan at the end of the project period.

Proposed Project Personnel

The multidisciplinary project team comprises educators/researchers, librarians, library administrators, and others in lead administrative, communications, and library and information science positions:

Role	Name	Current Position/Affiliation
Co-PI	Feili Tu-Keefner	Associate Professor, School of Information Science, University of South Carolina
Co-PI	Brett W. Robertson	Assistant Professor, School of Journalism and Mass Communications, University of South Carolina
Team Member	Denise Lyons	Commissioner of the Kentucky Department of Libraries and Archives/State Librarian
Team Member	April Hobbs	Graduate Student Outreach Librarian, University of Memphis Libraries, University of Memphis
Team Member	Cindy Pierard	Assistant University Librarian for Research Services, Fondren Library, Rice University

Co-PI Tu-Keefner has led teams to the completion of the aforementioned five preceding studies. Denise Lyons and April Hobbs have been integral project team members since 2015. Cindy Pierard, another team member, serves as an advisory board member for the Co-PI's awarded USC Excel Funding Program for Liberal Arts, Humanities, and Social Sciences. This program aims to extend the studies to include earthquakes in California and develop a framework featuring service guidelines and professional toolkits for critical community-first information services for libraries. Co-PI Robertson has previously secured external funding from the National Weather Service (NWS) and National Oceanic and Atmospheric Administration (NOAA) Collaborative Science, Technology, and Applied Research (CSTAR) division, as well as the National Science Foundation EPSCoR Research Infrastructure Improvement Program: Track-2 Focused EPSCoR Collaborations (RII Track-2 FEC). These projects look at the impact of excessive heat exposure in underserved, vulnerable, and rural communities in South Carolina. Specifically, initial findings from these projects indicate that one sizable underserved population, the unhoused, uses community resources, including public libraries, to learn about excessive heat and weather-related information.

Denise Lyons (Team Member) is the Commissioner of the Kentucky Department for Libraries and Archives. She created the first statewide library emergency preparedness committee and coordinated the first Train-the-Trainer program for South Carolina with the NEDCC. Since 2015, Denise has been a part of a project team studying librarian leadership and the public library's value to the community through disaster response and recovery. She is currently developing an emergency preparedness program for Kentucky's libraries and serves on the new Kentucky Disaster Recovery Framework committee.

April Hobbs (Team Member) is the Graduate Student Outreach Librarian at University of Memphis Libraries. Since 2017, she has been a part of a project team studying librarian leadership and the public library's value to the community through disaster response and recovery. She served as a public librarian for two and a half years before transitioning to academic libraries.

Cindy Pierard (Team Member) is Assistant University Librarian for Research Services at Rice University, where she provides leadership for the areas of access services, collections and content, research support, and teaching and learning. Her prior experience includes positions in academic research libraries in New Mexico and Kansas. She has led and contributed to emergency planning and response efforts at the institutional level. Cindy is also active in the International Federation of Library Associations & Institutions (IFLA) Evidence for Global and Disaster Health Special Interest Group. Her research interests include emergency planning and response, space planning, experiential learning and student success, and student scholarship and creative activity. In 2022, she was selected to participate in the Association of Research Libraries Leadership Fellows program. This yearlong program develops and prepares the next generation of senior library and archival leaders.

Project Library PREPARE: Planning, Response, Emergency Preparedness, and Resilience Education: Schedule of Completion

Phase 1 (August 1, 2024 - June 30, 2025)												
Task 1 (August 1, 2024-December 31, 2024)	2024					2025						
Objective	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apri	May	Jun	Jul
Objective 1: Complete recruiting advisory board members	█	█										
Objective 2: Organizing and analyzing the gathered data; develop/finalize codebook; compile a comprehensive list of the required competencies for librarians		█	█	█								
Objective 3: Consolidate all the library directors'/librarians' operations and service examples/models and categorize them into Five Core Tasks of Crisis Leadership and Emotional Intelligence at Work			█	█	█							
Objective 4: Map data, the required competencies for librarians, and service examples/models identified into FEMA's disaster lifecycle phases			█	█	█							
Objective 5: Conduct a thematic analysis study			█	█	█	█						
Objective 6: Conduct a literature review		█	█	█	█							
Meet with advisory board members						█						
Task 2 (January 1, 2025-June 30, 2025)												
Objective 1: Develop the framework with service guidelines and professional toolkits						█	█	█				
Objective 2: Evaluate the framework's draft by the advisory board									█	█		
Objective 3: Validate the framework with service guidelines and professional toolkits by three subject experts									█	█		
Objective 4: Create strategies to promote awareness of the resources developed											█	
Objective 5: Post the framework with service guidelines and professional toolkits, and the literature review to the website											█	
Survey the experts who validate the framework												█
Meet with advisory board members												█

Phase 2 – (July 1,2025-July 31, 2027)

Task 1 (July 1, 2025 - June 30, 2026)	2025					2026						
Objective	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apri	May	Jun	Jul
Objective 1: Initiate the process of outlining the topic for each module of the training programs and defining the sub-topics within	▬	▬	▬									
Objective 2: Recruit ten instructors for the training programs			▬	▬	▬							
Objective 3: Prototype a module for advisory board members to review and then make revisions				▬	▬	▬	▬	▬	▬			
Objective 4: Finalize technology for developing the training programs	▬	▬	▬									
Objective 5: Develop/produce/revise the modules' contents for the training programs				▬	▬	▬	▬	▬	▬	▬	▬	
Survey/Interview training programs' instructors												▬
Meet with advisory board members												▬

Phase 2 – (July 1, 2026 - July 31, 2027)

Task 2 (July 1, 2025 - June 30, 2026)	2026					2027						
Objective	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apri	May	Jun	Jul
Objective 1: Organizing resources and tailoring modules to cater to the diverse needs of various audiences	▬	▬	▬									
Objective 2: Review the training program contents by advisory board members and prepare the preliminary training programs			▬	▬	▬	▬						
Objective 3: Review the preliminary training programs by ten reviewers							▬	▬				
Objective 4: Post the training programs and framework with service guidelines and professional toolkits to the website						▬	▬	▬	▬			
Objective 5: Develop marketing strategies to promote awareness of the training programs, the framework and associated documents, and the website								▬	▬	▬		
Objective 6: Assessing the website's user experience/usability										▬	▬	
Survey/interview the training program reviewers											▬	▬
Survey/interview with advisory board members											▬	▬

Digital Products Plan

The end products of this project comprise 1) multimedia training programs covering the following broad topics -- Information First Responders; Building Community Engagement and Partnership; Emergency Preparedness and Disaster Response for Libraries; 2) a disaster information service framework for libraries and librarians and its associated resources (including service guidelines and professional toolkits); 3) literature review protocol publication of the literature examining critical community-first information services for libraries before, during, and after a natural disaster; 4) the project's digital research datasets archived to the OSF repository for free public access.

The project team will organize all the digital products produced by this grant. The following is a list of the products to be generated based on the grant activities.

Text Files Format: .txt; .csv; .pdf, pptx, Google OpenOffice file formats	--Profiles of the advisory board members, three subject experts, ten training program instructors, and ten training program evaluators; --A framework with service guidelines and professional toolkits on how to provide critical community-first information services for libraries before, during, and after a natural disaster; --Training programs' PowerPoint files, online lectures' training program lectures' transcripts, learning resources, services templates, exercises, etc.; --Survey protocols for project evaluations (advisory board members and training program instructor) --Pre-and post-tests (protocol and results) to evaluate the knowledge acquired by the training programs' evaluators; --Usability study protocol and results.
Audio/Video Files: Format: MP3; MP4	Online lecture recordings for the training program modules; Focus group meeting recordings with advisory board members; Interview recordings with the training program instructors and evaluators
Datasets	Focus group meeting and interview transcripts; survey data files
HTML Files	A sustainable and shareable disaster information services repository website to post the resources created from the project activities hosted by the College of Information and Communication under the USC system server

The potential software to be used for data collection and management includes, but is not limited to Qualtrics, NVivo, Microsoft Office Suite (e.g., Word, Excel, and PowerPoint), Microsoft Teams Meeting, Zoom meeting, Camtasia, Google OpenOffice, Otter.ai, Grain … etc. All the digital data will be kept in the USC system server; the project team members affiliated with the USC will have the right to access the data. The security of data curation is ensured. The Co-PIs will follow the project schedule and assessment plan to monitor the workflow and audit the timelines for creating the products. The Co-PIs will manage all project deliverables and review data products before publication. The project team and advisory board will review initial data products to ensure that they accurately represent the project's activities, and offer ongoing review and feedback as products are revised and synthesized. The Co-PIs and GA will work in tandem to ensure the quality of data transcription and anonymization of collected data.

The Co-PIs will seek approval for the research protocols and human subject protection plans from the University of South Carolina Institutional Review Board (USC/IRB). The research will follow protocols established by the USC/IRB for human subjects concerning privacy, the anonymity of participants, cultural sensitivities, and confidentiality of any information collected. The approval anticipation will be in the summer of 2023. All project participants will be assigned representing codes (comprising alphabets and numbers). Any identifying personal information will be redacted from collected data, such as interview transcripts and field observation notes. All data collected and analyzed during the project will be stored on secure, password-protected server systems to which only the project staff will have access. No sensitive information will be collected during the project period.

Metadata. The USC Scholar Commons repository interface will assign metadata to research and data products. The metadata is flexible and customizable based on dissemination needs. All metadata fields, whether or not they are user oriented, are targeted to promote search discoverability. The PIs will consult with USC librarians who maintain the commons on appropriate metadata standards and content based on the goals for dissemination, which will be established throughout the duration of the project. In addition, the USC Digital Research Services will assist in producing all technical, descriptive, administrative, or preservation metadata or linked data.

Availability
Access will be available via the project websites, accessible using standard web browsers, and deposited in USC's Scholar Commons repository and OSI.

The Co-PIs own the copyright of the end projects in digital format. The University of South Carolina will not assert ownership rights over the digital products developed from this project's activities. No conditions will be imposed on accessing the resources posted on the web portal created for the project. The Co-PIs will provide a clear overview of the license details, including attribution and how the research products can be re-used. The training programs along with their associated resources, as well as the framework and its related resources, will be accessible to all and hosted on a sustainable and shareable disaster information services repository website developed by the project team. This website will be hosted by USC's College of Information and Communications (CIC) – the more prominent college of which is the School of Information Science (iSchool). All products will be made available under a Creative Commons 4.0 license. In addition, the framework and its related documents will be added to USC's Scholar Commons repository. The project's literature review protocol and digital research datasets will be archived in the OSF repository for free public access. Finally, research publication and presentation ownership will vary based on agreements with various publishing venues. The Co-PIs and project stakeholders will promote access to project resources via meetings, conferences, and other channels, such as social media.

The project's end products will include training programs in multimedia format covering the following broad topics -- Information First Responders; Building Community Engagement and Partnership; Emergency Preparedness and Disaster Response for Libraries; and a disaster information service framework for libraries and librarians and its associated resources (including service guidelines and professional toolkits). The project team members will facilitate the creation of professional development opportunities that may include guest lectures in LIS programs, webinars, mini-trainings, and participatory workshops, to better help provide critical community-first information services.

Our marketing strategy leverages project leaders' extensive networks across academic libraries, state and public library agencies, community partners, and emergency management leadership at national and state levels. We disseminate information about our comprehensive resources at professional conferences in LIS, communication, and emergency management. We also address identified gaps and seize point-of-impact opportunities. Collaborating internationally, we tailor resources to specific needs and notify a broader audience via listservs, social media, and various channels. Team members promote our work through presentations at key conferences (e.g., state conventions, ALA, ACRL, PLA, ARSL, Core Forum, and similar) and publications in renowned journals (e.g., LQ, PLQ). We also share our training program curricula with MLIS programs at conferences such as ALISE/ASIS&T and in publications (e.g., JELIS) targeting LIS education-related communities. In partnership with members of the Chief Officers of State Library Agencies (COSLA, and its regional groups), we package training programs into easily digestible components for personnel in small and rural libraries, potentially recording these on DVD for those without high-speed internet access. Open-access materials are permanently hosted on the disaster information services website under the College of Information and Communication (CIC/USC), with all digital research products archived in the OSF repository.

Sustainability
The datasets generated from the project activities will be made available outside the research team and will be anonymized with participants' verbal consent. The Co-PIs will limit access to data products (along with following the University of South Carolina IRB access protocols) and require a confidentiality agreement from re-users. The Co-PIs will share more widely aggregate data and data analysis protocols that contain no sensitive information.

One of the Co-PIs and her collaborators are constructing a sustainable and shareable disaster information services repository website, funded by the Network of National Library of Medicine Region 2 Office. Upon completion, the finalized training programs, framework with service guidelines and professional toolkits, research study summaries, and other relevant resources will be uploaded to this website. This repository site will be permanently hosted under the College of Information and Communication (CIC/USC) for consistency and sustainability. The Co-PIs will collaborate with team members to maintain and update the content on this site. As this repository site is integrated into the CIC/USC research resources and falls within the USC infrastructure, its sustainability is assured.

USC's Scholar Commons and OSF will support metadata for data and research products after the award period. The project team will evaluate the data management plan quarterly and annually in meetings with the project team and advisory board. The Co-PIs will monitor compliance with the plan and new institutional and technological developments that might warrant modification of the plan. The Co-PIs will perform this evaluation and monitoring with assistance from the Research Data Librarian at the University of South Carolina, Stacy Winchester. Datasets will be curated and preserved following OSF standards.

Data Management Plan

Identify the type(s) of data you plan to collect or generate, and the purpose or intended use(s) to which you expect them to be put. Describe the method(s) you will use, the proposed scope and scale, and the approximate dates or intervals at which you will collect or generate data.

1. In Phase 1 (August 1, 2024 - June 30, 2025): The focus will be to create the proposed framework with service guidelines and professional toolkits. These resources will then be peer-reviewed by the advisory board members and validated by three experts in the subject areas of this project. We will collect both quantitative and qualitative data:
   - Quantitative data: We will survey the three experts who will validate the proposed framework with service guidelines and professional toolkits (completed by the end of June 2025).
   - Qualitative data: We will conduct focus group meetings with the advisory board members regarding the value and benefits of practices of the proposed framework and evaluate the project's effectiveness (completed by the end of June 2025).

2. In Phase 2 (July 1,2025-July 31, 2027): Our project will focus on developing multimedia training programs as proposed, which will be posted along with the framework and its associated resources on a sustainable and shareable disaster information services repository website. Additionally, the project team will recruit ten reviewers, including public and academic librarians as well as LIS educators, to evaluate the effectiveness of the preliminary training program. The training programs and the framework with services guidelines and professional toolkits will be available for free access on a sustainable and shareable disaster information services repository website currently under construction by the project team. Therefore, it is necessary to examine the potential user experience and usability of this website to facilitate information sharing and user access. In this case, we will collect quantitative, qualitative, and hybrid data:
   - Quantitative data: We will recruit ten instructors to record the online lectures to be integrated into the proposed training program modules. We will survey instructors to assess the training programs regarding potential improvements (completed by the end of June 2026). The online training modules are intended to convey core concepts in an effective and engaging way. We will administer pre- and post-tests with reviewers who have completed the modules to evaluate their effectiveness (completed by the end of March 2027). The tests will be used to assess their growth in knowledge and skills. In addition, reviewers will be surveyed to gain feedback on their learning experience, including suggestions for improvements. All feedback will be used to revise and strengthen the modules (completed by the end of July 2027). The project team will also survey the advisory board members to evaluate the project's effectiveness (completed by the end of July 2027).
   - Qualitative data: To further understand the quality of the proposed training program, we will also select several instructors for one-on-one interviews regarding potential improvements to the training program (completed by the end of June 2027). Focus group meetings will be held with the advisory board members to examine the effectiveness of the training programs (completed by the end of July 2027). We'll also interview the advisory board members to evaluate the project's effectiveness (completed by the end of July 2027).
   - Hybrid data: USC CIC Biometrics and User Experience (BaUX) Lab will assist the research team in assessing the website's user experience, distributing resources, and gathering access logs of resources posted on the website to evaluate the effectiveness of the promotion strategies (completed by the end of June 2027). The data collected will be a combination of both quantitative and qualitative data.

Will you collect any sensitive information? This may include personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information. If so, detail the specific steps you will take to protect the information while you prepare it for public release (e.g., anonymizing individual identifiers, data aggregation). If the data will not be released publicly, explain why the data cannot be shared due to the protection of privacy, confidentiality, security, intellectual property, and other rights or requirements.

All project participants will be assigned representing codes (comprising alphabets and numbers). Any identifying personal information will be redacted from collected data, such as focus group meeting and interview transcripts. Final datasets made available outside of the research team will be anonymized, with participants' verbal consent. The Co-PIs will limit access to data products (along with following the University of South Carolina IRB access protocols) and require a confidentiality agreement from re-users. The Co-PIs will share more widely aggregate data and data analysis protocols that contain no sensitive information. All data collected and analyzed during the project will be stored on secure, password-protected server systems to which only the project staff will have access. No sensitive information will be collected during the project period.

What technical (hardware and/or software) requirements or dependencies would be necessary for understanding retrieving, displaying, processing, or otherwise reusing the data?

All data will be shared in PDF format and include qualitative, quantitative, and hybrid data. While those looking to reuse the data may use computer-supported qualitative analysis software, this software is not required for quantitative and qualitative analysis.

What documentation (e.g., consent agreements, data documentation, codebooks, metadata, and analytical and procedural information) will you capture or create along with the data?

The project team who have passed the USC Human Subjects training will administer informed consent to all research participants and collect signed, paper consent forms. Each participant will be assigned a random three-digit numerical code preceded by a two-letter data type prefix (e.g., IN003, AD005, RE002, PA011). The Co-PIs will create a spreadsheet matching each code to the participant's name; this file will be kept in a password-protected folder accessible to the project team. Consent agreements will be scanned and stored in this same folder. Print copies of agreements will be held in a locked file cabinet for at least three years after the study's end (according to USC IRB requirements). Consent agreements will be scanned and stored in this same folder. Print copies of agreements will be kept in a locked file cabinet for at least three years after the study's end (according to USC IRB requirements). Once the focus group meetings and interviews have been transcribed, the corresponding audio files will be deleted to avoid identifiable voice information. All research data maintenance will follow a 3-2-1 backup plan: three copies of the data, two local but on different mediums, and one stored offsite. Each data source will be in a password-protected (if digital) or locked (if physical) storage. Other research documentation, protocols, and correspondence will be created and stored on local, secure computers and servers in .docx and .pdf formats. The naming convention of a randomly assigned three-digit number preceded by a two-letter prefix indicating the data collection type will be used to label these documents as necessary.

      Codebooks (to inform qualitative data analysis collected at various stages of the project and facilitate the thematic study) will be generated and securely stored on local machines in .doc and .pdf formats. These documents will be labeled using a name, including a randomly assigned three-digit number indicating the data collection type (e.g., FGM for focus group meetings, INV for interviews, THE for thematic study, etc.).

      The USC Scholar Commons repository interface will assign metadata to research and data products. The metadata is flexible and customizable based on dissemination needs. All metadata fields, whether or not they are patron-facing, are targeted to promote search discoverability. The PI will consult with USC librarians who maintain the commons on appropriate metadata standards and content based on the goals for dissemination, which will be established throughout the duration of the project. In addition, the USC Digital Research Services will assist in producing all technical, descriptive, administrative, or preservation metadata or linked data.

What is your plan for managing, disseminating, and preserving data after the completion of the award-funded project?

All shareable datasets will be deposited into OSF. The Co-PIs will work with the USC Digital Research Services to develop and share research data collected during each project phase.

When and how frequently will you review this data management plan? How will the implementation be monitored?

The project team will evaluate the data management plan quarterly and annually in meetings with the project team and advisory board. The Co-PIs will monitor compliance with the plan and new institutional and technological developments that might warrant modification of the plan. The Co-PIs will perform this evaluation and monitoring with assistance from the Research Data Librarian at the University of South Carolina, Stacy Winchester. Datasets will be curated and preserved following OSF standards.